

Well and Onsite Wastewater Facts

WASTEWATER TECHNOLOGY

FSN - 15

Loudoun County Health Department

October 2013

Component Type: Treatment

Function: A septic tank provides primary treatment for the wastewater. The same manufactured tanks are also used for settling or trash tanks, and holding tanks. Chapter 1066 sets forth criteria for tanks utilized in Loudoun County effective April 1, 2010.

First approved in Virginia: 1940's

Number Approved in Loudoun County: 14,702*

Number Pump Tanks Approved in Loudoun county: >3,000

*** Septic, holding, preliminary or trash tank**

Description of Use

Septic Tanks have been in existence since the early 1900's. Certainly the earlier versions were not constructed as well as they are today. A well designed and maintained concrete, fiberglass or plastic tank should last about 50 years. Steel tanks (many made by Sears) only last about 10 years due to corrosion problems and are not used today. On one end is the input pipe from the dwelling, on the other end is the output pipe to the dispersal field. The tank itself is designed to be water tight. When the waste flows into the tank, the heavy solids (primarily feces) sink to the bottom to form a layer of 'sludge'. Lighter materials (grease, fats, small food particles ' etc.) float on the surface forming a layer of 'scum'. Between these two layers is a soup of suspended materials and water soluble chemicals which is sent on to the dispersal system and the soil for further treatment. Most septic tanks now have an effluent filter to assure that large particles do not go to the dispersal system. Often the septic tank is used in conjunction with an alternative treatment system such as a fixed media system.

Recommended Maintenance Required

Over time the sludge layer and the scum layer increase and must be removed. That is done by a Sewage Handler typically called a "Pumper". A typical tank should be pumped every three to five years. The effluent filter will require cleaning more frequently. The filter can be cleaned by the homeowner and needs only to be hosed off allowing the solids to go back into the septic tank. Other important Do's and Don'ts are found on FSN – 2

Tanks Approved

A listing of approved tanks may be found on the County Web Site under Environmental Health--> Services-->Septic Systems-->Tank Requirements.

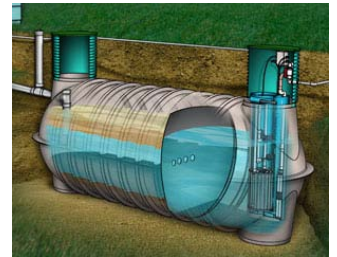
Septic Tanks



Plastic



Concrete



Fiberglass



Installed